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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,529	12/05/2003	Tomoyuki Funaki	YAMA:060	8293

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EXAMINER	
HUR, ECE	
ART UNIT	PAPER NUMBER
2175	
MAIL DATE	DELIVERY MODE
04/10/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/728,529	FUNAKI, TOMOYUKI	
	Examiner	Art Unit	
	ECE HUR	2175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 February 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 1, 2009 has been entered.

Status of Claims

Claims 1-10 are pending in the case. Claims 1, 6, 9 and 10 are independent claims.

Response to Arguments

Applicant's arguments filed February 1, 2009 have been fully considered but they are not persuasive. See rejection details. Applicant argued:

1) Applicant argues about the amended Claims, see rejection details amendment necessitated the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Tice, 6,751,439.

Regarding Claim 1, Tice discloses an apparatus for arranging music score displaying data for displaying a music score having measures of music progression on a given music score display area of a display device across a plurality of staff tiers, each tier containing one or more measures of variable lengths as justified for the display area, said apparatus comprising:

an input device which inputs data representing a music performance in a plurality of measures of music progression (Tice, FIG. 1, FIG. 2, FIG. 9E); and

a controller (Tice, FIG.1) comprising:

a musical score notational element determining device which determines music score notational elements necessary for displaying on said display area a music score for each of said measures based on said music performance representing data (Tice, FIG. 9E, FIG.2);

a display size determining device which determines display sizes of said music score notational elements to be displayed on said display area (Tice, FIG.9E, FIG.2);

a horizontal length determining device which determines a horizontal length of the music score to be displayed on said display area (Tice, FIG. 9E, FIG.15, calculate note length);

a measure apportioning device which calculates, for each of said measures based on said determined display sizes, a minimum horizontal length for placing in the measure at least one kind of said music score notational elements without an overlap in a horizontal direction among said music score notational elements as determined to be displayed for each of said measures, and apportions said measures for each of said staff tiers based on said calculated minimum horizontal length of each of said measures and said determined horizontal length of the music score to be displayed on said display area such that the music score notational elements of each of said measures are placed on the apportioned staff tier in a length of at least said minimum horizontal length while each of said measures is positioned only on a single staff tier and not spanning across multiple staff tiers (Tice, FIG. 9E, FIG. 1, FIG. 2, FIG. 15, calculate note length, insert note into measure); and

a music score display data output device which outputs music score display data for displaying on said display area said music score notational elements on said staff tiers according to the apportionment of the measures by said measure apportioning device (Tice, FIG.9E, FIG.2).

Regarding Claim 2, Tice discloses an apparatus, wherein said music score notational elements are notes (Tice, FIG.1, FIG. 9E).

Regarding Claim 3, Tice discloses an apparatus, wherein said display size determining device includes controls to be operated by a user for determining the display sizes of said music score notational elements (Tice, FIG. 9E).

Regarding Claim 4, Tice discloses an apparatus, wherein the music score is displayed on said display area in the plurality of staff tiers on a page or pages, each page having said music score display area (Tice, FIG. 9E), and wherein said controller further comprises: a vertical length determining device which determines a vertical length of the music score to be displayed on said display area (Tice, FIG. 9E, FIG. 15); and a staff tiers apportioning device which calculates, for each of said staff tiers based on said determined display sizes, a maximum vertical length for placing all the music score notational elements in the measures apportioned for the staff tier by said measures apportioning device, and apportions said staff tiers for

each page based on said calculated maximum vertical length of each of said staff tiers and said determined vertical length of the music score to be displayed on said display area such that a number of staff tiers shall be placed within said music score display area on the page (Tice, FIG. 9E), wherein said music score display data output device outputs music score display data for displaying the music score for the page by placing the music score notational elements in the staff tiers for which the measures are apportioned by said measure apportioning device according to the apportionment of the staff tiers as apportioned by said staff tiers apportioning device (Tice, FIG. 9E, FIG. 15, calculate note length, insert note into measure).

Regarding Claim 5, Tice discloses an apparatus, wherein said staff tiers apportioning device calculates said maximum vertical length by calculating the highest position of a notational element and the lowest position of a notational element among said notational elements to be placed in each of said staff tiers (Tice, FIG. 9E).

Regarding Claim 6, Tice discloses an apparatus for arranging music score displaying data for displaying a music score having measures of music progression on a given music score display area of a display device across a plurality of staff tiers, each tier containing on or more measures of variable lengths as justified for the display area, said apparatus comprising: an input device which inputs data

representing a music performance in a plurality of measures of music progression (Tice, FIG. 9E); and

a controller comprising (Tice, FIG. 1, FIG.2):

a display size determining device which determines display sizes of music score notational elements with respect to the measures to be displayed on said display device based on the input music performance representing data (Tice, FIG. 9E);

a measure length calculating device which calculates, for each of said measures based on said determined display sizes of the music score notational elements, a horizontal length of the measure for placing in the measure at least one kind of said music score notational elements without an overlap in a horizontal direction among said music score notational elements to be displayed on said display area (Tice, FIG. 9E);

a measure apportioning device which apportions the measures for each of said staff tiers so that each of the measures to be displayed on said display area is positioned only on a single staff tier and not spanning across multiple staff tiers (Tice, FIG. 9E); and

a music score display data output device which outputs music score display data for displaying on said display area said music score notational elements in said measures according to said determined display sizes of the music score notational elements and said calculated horizontal lengths of the measures (Tice, FIG.9E).

Regarding Claim 7, Tice discloses an apparatus, wherein the measure apportioning device adjusts said music score display data such that a music score is displayed in a plurality of staff tiers on said display area on a page-by-page basis, and apportions said music score notational elements to be placed in a uniform distribution through the staff tier with respect to the music progression (Tice, FIG. 9E).

Regarding Claim 8, Tice discloses an apparatus, wherein said music score notational elements are notes (Tice, FIG. 9E).

Regarding claim 9, Tice discloses a computer-readable storage medium storing a computer program executable by an apparatus for arranging music score displaying data for displaying a music score having measures of music progression on a given music score display area of a display device across a plurality of staff tiers, each tier containing one or more measures of variable lengths as justified for the display area, the computer program containing instructions for:

inputting data representing a music performance in a plurality of measures of music progression (Tice, FIG.9E, FIG. 1, FIG.2);

determining music score notational elements necessary for displaying on said display area a music score for each of said measures based on the input music performance representing data (Tice, FIG. 9E, FIG. 15);

determining display sizes of said music score notational elements to be displayed on said display area (Tice, FIG. 9E, FIG. 15);

determining a horizontal length of the music score to be displayed on said display area (Tice, FIG. 9E, FIG. 15);

calculating, for each of said measures based on said determined display sizes, a minimum horizontal length for placing in the measure at least one kind of said music score notational elements without an overlap in a horizontal direction among said music score notational elements as determined to be displayed on said display area for each of said measures,

apportioning said measures for each of said staff tiers based on said calculated minimum horizontal length of each of said measures and said determined horizontal length of the music score to be displayed on said display area such that the music score notational elements of each of said measures are placed on the apportioned staff tier in a length of at least said minimum horizontal length while each of the measures is positioned only on a single staff tier and not spanning across multiple staff tiers (Tice, FIG. 9E, FIG. 15, calculate note length, insert note into measure); and

outputting music score display data for displaying on said display area said music score notational elements on said staff tiers according to the apportionment of the measures made in the apportioning instruction(Tice, FIG. 9E, FIG. 15, calculate note length, insert note into measure).

Regarding Claim 10, Tice discloses a computer-readable storage medium storing a computer program executable by an apparatus for arranging music score displaying data for displaying a music score having measures of music progression a given music score display area of on a display device, across a plurality of staff tiers, each tier containing one or more measures of variable lengths as justified for the display the computer program containing instructions for:

inputting data representing a music performance in a plurality of measures of music progression (Tice, FIG.1, FIG. 2, FIG. 9E, FIG. 15);

determining display sizes of music score notational elements with respect to the measures to be displayed on said display device based on said music performance representing data (Tice, FIG. 15, Calculate note length);

calculating, for each of said measures based on said determined display sizes of the music score notational elements, a horizontal length of the measure for placing in the measure at least one kind of said music score notational elements without an overlap in a horizontal direction among said music score notational elements to be displayed on said display area (Tice, FIG. 9E, FIG. 15, Calculate note length, insert note into measure);

apportioning the measures for each of said staff tiers so that each of the measures to be displayed on said display area is positioned only on a single staff tier and not spanning across multiple staff tiers (Tice, FIG. 9E, FIG. 15, Calculate note length, insert note into measure); and

outputting music score display data for displaying on said display area said music score notational elements in said measures according to said determined display sizes of the music score notational elements and said calculated horizontal lengths of the measures (Tice, FIG. 9E, FIG. 15, Calculate note length, insert note into measure).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Johnson et al., US 5,962,800, 10/05/1999, "Scale-based music notation system".

2) Aoki et al., US 20010045154, 11/29/2001, "Apparatus and method for generating auxiliary melody on the basis of main melody".

3) Hiratsuka, US 6,545,208, 04/08/2003, "Apparatus and method for controlling display of music score".

4) Varme, US 20040074376, 04/22/2004, "System for playing music having multi-colored musical notation and instruments".

5) Hiratsuka, US 20040069115, 04/15/2004, "Storage medium containing musical score displaying data, musical score display apparatus and musical score displaying program".

6) Suzuki et al., US 20040094017, 05/20/2004, "Method and apparatus for editing performance data with modification of icons of musical symbols".

7) Funaki, US 20060065100, 03/30/2006, "Apparatus for displaying musical information without overlap".

8) Wedel, US 7,030,307,, 04/18/2006, "Music Teaching Device and Method".

9) Bittner et al., US 7,119,266, 10/10/2006, "Electronic music display appliance and method for displaying music scores".

10) Funaki, US 7,220,909, 05/22/2007, "Apparatus for displaying musical information without overlap".

11) Matsumoto, US 20010023633, Musical Score data Display Apparatus.

12) Chesters, US 4,885,969, "Graphic Music System". 121/2/1989.

13) Roeder, US 6,660,922, "System and Method for Creating, Revising and Providing a Music Lesson Over a Communications Network". 12/09/2003.

14) Lui, US 5,146,833, "Computerized Music Data System and input/output devices using related rhythm coding".

15) Funaki, US 7,220,909, "Apparatus for Displaying Musical Information Without Overlap".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ECE HUR whose telephone number is (571) 270-1972. The examiner can normally be reached on MONDAY-THURSDAY 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM BASHORE can be reached on (571) 272-4088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ece Hur
E.H./e.h.

March 10, 2009

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Supervisory Patent Examiner, Art Unit 2175